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Before the
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of:

Amendment of the Commission's
Rules to Establish Rules and
Policies Pertaining to a Mobile
Satellite Service in the
1610-1626.5/2483.5-2500 MHz
Frequency Bands

CC Docket No. 92-166

PETITION FOR CLARIFICATION AND PARTIAL RECONSIDERATION

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Summary

Motorola Satellite Communications, Inc. ("Motorola") requests partial reconsideration and clarification of certain rules and policies set forth in the Report & Order issued in the above-captioned proceeding regarding licensing and service rules for the Above 1 GHz Mobile Satellite Service in the 1610-1626.5 MHz and the 2483.5-2500 MHz bands. While Motorola agrees with virtually all of the decisions reached by the Commission, there are five important issues the Commission should reconsider.

First, and most important, the Commission should reconsider the need for an interim spectrum sharing plan to protect GLONASS operations in the U.S. All of the applicants agree that an interim plan is completely unnecessary. The interim plan is not needed because it appears that the FAA is not planning to include GLONASS as part of the Federal Radionavigation Plan, and because the coordination effort with the Russian Federation is promising.

Second, the Commission should reconsider the need for an out-of-band emission mask. At a minimum, the Commission should adopt the proposal of four of the applicants to establish principles for developing such a mask.

Third, the Commission should adopt a rule prohibiting an MSS licensee from seeking or accepting exclusive access arrangements. Given that the Commission has imposed global requirements on the licensees, that the value of the MSS service depends on access worldwide, and that the Commission has ample

legal authority for imposing this condition, a rule prohibiting exclusive access arrangements should be imposed.

Fourth, the Commission should clarify its position on the submission of next-generation systems. Due to advances in technology, possible market demands, and the Commission's application processing requirements, MSS licensees may need to file for second generation systems before seven years have expired.

Fifth, the Commission should consider the comments of numerous parties on the advisability of permitting AMSC to amend its application to gain access to additional spectrum in the L-band. Competition would be increased by allocating all of the available spectrum in this band to new entrants.

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PETITION FOR CLARIFICATION AND PARTIAL RECONSIDERATION

Pursuant to Sections 1.4(b) and 1.429 of the Commission's rules, Motorola Satellite Communications, Inc. ("Motorola") hereby petitions the Commission for clarification and partial reconsideration of a limited number of matters addressed in the Report and Order, 59 Fed. Reg. 53,294 (Oct. 21, 1994), in the above-captioned proceeding. The Commission should not view this petition, however, as an opposition to the principal findings and conclusions reached in the Report & Order. To the contrary, Motorola agrees with virtually all of the decisions reached by the Commission on the major issues that it faced in this proceeding. For example, the Commission correctly determined that all of the available Mobile Satellite Service ("MSS") spectrum should be assigned only to non-geostationary ("Big LEO") systems capable of providing service to the entire United States and all populated regions of the world. There is also ample justification and record support for the Commission's stringent financial qualification standards, interservice sharing rules, and its decision to allow for non-common carrier service.

Motorola is prepared to accept the Commission's spectrum sharing plan, recognizing that this plan only applies in the United States and that as demand grows for its service, the IRIDIUM system will need access to more spectrum in the United States. The Commission's band plan, however, is a good start for implementing Big LEO MSS service.

Motorola sincerely appreciates the time and effort spent by the Commission and its staff in rapidly bringing this proceeding to a conclusion and in announcing repeatedly its intention to begin licensing MSS systems in the 1.6/2.4 GHz bands by January 31, 1995. For the most part, the rules enunciated in the Report and Order seem designed to achieve the rapid licensing of qualified MSS applicants and the introduction of global personal mobile communications services to the public. As the Commission has recognized, the proposed Big LEO MSS systems will "create a new industry providing enormous economic benefit to the United States, and any other country that chooses to participate in the service."^{1/} Report & Order, at ¶ 1. The Commission also correctly noted that Big LEO systems will offer numerous benefits to the public, including global dial tone, search and rescue communications, disaster management communications, environmental monitoring, and worldwide paging. Id. at ¶ 3. Motorola further agrees with the Commission's assessment that Big LEO systems will

^{1/} In this regard, it is worth noting that in the recently filed amendments to the pending Big LEO applications, the estimated costs of constructing the proposed systems have increased from between \$564 million to \$3.8 billion each. For some of these systems, the ground segment costs will be substantial as well.

play a critical role in the development of the global information highway. Id.

Motorola believes, however, that in a few important areas, the Commission incorrectly balanced the varying interests and unfortunately has come to the wrong conclusions. Most significantly, Motorola takes exception to the Commission's determination that an interim spectrum sharing plan should be imposed on the Big LEO systems in order to protect certain operations of the Russian Federation's GLONASS system in the United States. In this regard, it appears that the Commission has failed to adequately consider the comments of Motorola and others as to the lack of intent in making GLONASS part of the Federal Radionavigation Plan for U.S. controlled airspace.^{2/} Not surprisingly, the Report & Order is internally inconsistent as to whether GLONASS operations in the United States below 1610 MHz are entitled to protection from MSS systems. Compare Report & Order, at ¶¶ 51-53 with ¶ 128. Moreover, in light of the recent successful conclusion of the U.S./Russian bilateral discussions on the coordination of the GLONASS-M system, and the position by the United States to coordinate GLONASS-M only in its "final configuration," there is no need to create or impose an

^{2/} In establishing its interim plan, the Commission appears to have made several erroneous findings without any record support, such as the need for a 4 MHz guardband between CDMA MSS operations and the uppermost GLONASS channel. In addition, the Commission failed to consider the proposal of four of the applicants (Motorola, TRW, Inc., Constellation Communications, Inc. ("Constellation") and Mobile Communications Holdings, Inc. ("MCHI")) that there is no need for such a plan until the use of GLONASS in U.S. controlled airspace is approved by the FAA and a second CDMA system becomes operational. See Joint Proposal and Supplemental Comments (Sept. 9, 1994) ("Joint Proposal").

interim band plan on the MSS licensees.^{3/} The need for an interim band plan for Big LEO service in the U.S. is predicated on several simultaneous assumptions:

- GLONASS will be certified for use in U.S. airspace by the FAA, and
- Two or more Big LEO CDMA MSS systems will be operational in the U.S. before the GLONASS system employs its final frequency plan, and
- The two CDMA systems will cause harmful interference to GLONASS receivers, and
- The effects on non-MSS sources of interference to GPS and GLONASS (which are greater than MSS) can be mitigated, and
- A 4 MHz guardband will be needed to protect GLONASS from the MSS CDMA systems.

Any one of these assumptions can be challenged and the likelihood of all of them coming to fruition is remote. Until protection values are adopted and GLONASS is implemented domestically, the Commission, at most, should condition Big LEO licenses on future out-of-band emission standards.

Second, Motorola questions the Commission's conclusions concerning the need for modifying its out-of-band emission rules to accommodate MSS systems using different modulation schemes and access techniques. Motorola believes that the Commission erred

^{3/} Motorola also disagrees with the Commission's decision to reduce the amount of spectrum available to the FDMA/TDMA system by 1.25 MHz under the contemplated interim band plan. Such a drastic reduction in the amount of spectrum available to one MSS system is wholly disproportional to the total amount of spectrum (2 MHz) at risk. In effect, Motorola would lose approximately 25 percent of its available capacity, while TRW, for example, would not lose any channels. At most, each MSS licensee should only bear its proportionate share of any loss of spectrum in order to protect the GLONASS system. In any event, as indicated above, there is no need for the establishment of any interim band sharing plan.

in not establishing an equitable out-of-band emission mask between the FDMA/TDMA and CDMA band segments as well as a comparable mask at the lower end of the CDMA band segment. At least, the Commission should have adopted the proposal of four of the MSS applicants to establish principles for developing such a mask once all of the licensees have developed their system designs.

Third, the Commission failed to address the request of four of the applicants in their Joint Proposal for a policy against the acceptance by U.S. Big LEO licensees of exclusive access arrangements in foreign countries. Such a policy is consistent with long-standing Commission practices in promoting competition as well as in protecting U.S. interests in the international satellite and cable landing license fields. Failure to prohibit such anti-competitive arrangements would allow foreign interests to play off one U.S. licensee against another and would run afoul of the well-settled Commission policies against "whipsawing."

Fourth, the procedural rules regarding the timing for submitting next-generation MSS system applications must be clarified in order to eliminate unnecessary rigidity in the regulatory process. Absent such a clarification, Big LEO MSS licensees might be precluded from applying for follow-on systems in a timely manner. This could have the unintended effect of preventing licensees from maintaining sufficient capacity on their systems to accommodate expected growth in demand for Big LEO services.

Finally, Motorola requests that the Commission consider the comments of numerous parties as to the inadvisability of allowing the sole geostationary applicant, AMSC Subsidiary Corporation ("AMSC"), to amend its application to gain access to additional spectrum in the L-band. Nowhere in the Report & Order has the Commission addressed the substantial policy and competition reasons raised by these commenters as to why AMSC should be precluded from constructing satellites in any portion of the frequency bands that are the subject of this proceeding.

I. THE COMMISSION'S INTERIM SPECTRUM SHARING PLAN TO PROTECT GLONASS IS UNWARRANTED AND NOT SUPPORTED BY THE RECORD IN THIS PROCEEDING

In the Comments and Reply Comments of Motorola and other parties in this proceeding, including Loral/QUALCOMM Partnership, L.P. ("LQP"), it was pointed out to the Commission that there is no need for, and there are serious policy reasons militating against, the adoption of any interim or transitional MSS spectrum sharing plan to protect the Russian GLONASS system, because, as the Commission itself noted, the timing and conditions for use of GLONASS in U.S. airspace are uncertain. In fact, by the time the Report & Order was released by the Commission, none of the MSS applicants supported the adoption of a specific interim or transitional band sharing plan. See Joint Proposal at 2-5; Letter from LQP to the FCC (Sept. 13, 1994).

The Commission nonetheless decided to adopt a specific interim plan in the event that up to 2 MHz of L-band MSS spectrum

was impaired in order to protect GLONASS in the United States. See Report & Order, at ¶¶ 52-53. Motorola believes that, for the following reasons, the imposition of such a plan, at this time, is unwarranted and not supported by the record in this proceeding.

**A. GLONASS Operations in the United States Are
Not Now Entitled to any Protection from MSS Systems**

The Commission's determination that an interim band sharing plan for MSS systems operating in the United States is premised upon the unwarranted assumption that GLONASS may be "used in conjunction with the U.S. Global Positioning System ("GPS") to provide aircraft precision approach and terminal communications, as contemplated by the Federal Aviation Administration" Report & Order, at ¶ 49. As Motorola pointed out in its comments, however, it is highly unlikely that the Federal Aviation Administration ("FAA") will authorize GLONASS for precision aircraft approaches -- the interference case which would inhibit MSS operations absent a shifting down in frequencies. See Motorola Comments at 42-44 and Appendix 8; Motorola Reply Comments at 38-39 and Appendix 2. Indeed, all indications are that the FAA is not planning on including GLONASS for navigation purposes in the United States. Id. Rather, the FAA has stated publicly that it will use GPS plus a Wide Area Augmentation System ("WAAS") for both en route and precision

approaches in U.S. controlled airspace.^{4/} Indeed, the Commission explicitly recognizes "that it is possible that the FAA will decide not to use GLONASS until it shifts its frequencies to its final configuration," and that "[i]t may be prohibitively expensive for airlines to develop and install equipment using interim standards capable of protecting equipment using GLONASS." Report & Order, at n.62.

Motorola submits that instead of adopting an interim or transitional plan now to protect GLONASS operations in the United States in the unlikely event that the FAA reverses its current position, the Commission instead should defer consideration of any such plan unless or until GLONASS is affirmatively certified into the Federal Radionavigation Plan to provide precision approaches.^{5/} Given what we know today about the U.S. government's plans, there is absolutely no need at this time to protect GLONASS operations in the United States from MSS transmissions.

The Commission's approach of establishing an interim band plan is also inconsistent with other findings made in the Report & Order, such as its treatment of issues relating to in-

^{4/} The implementation of WAAS is intended by the FAA to replace the need for additional GPS satellites as well as provide other integrity information. Its implementation is anticipated to cost over \$500 million.

^{5/} The prospects for incorporating GLONASS into the Federal Radionavigation Plan are not bright. Despite over a decade of trying, there are only 12 to 15 operational GLONASS satellites now in orbit of the required 24 satellite constellation.

band interference to ARNS from MSS uplinks.^{6/} Specifically, the Commission concluded that it would not be necessary to protect GLONASS operations beyond the provisions of RR 731E and the obligation to coordinate MSS systems under current ITU procedures, as requested by the aviation community,

particularly absent definitive technical characteristics and requirements of a future GNSS system, and a definitive statement as to GLONASS's role in the GNSS. Further, imposing additional constraints on Big LEO use of the 1610-1616 MHz band could jeopardize the applicants' ability to implement their systems. This could deprive the United States and those countries who choose to participate in offering services the potential benefits that Big LEOs could bring.

Report & Order, at ¶ 128 (footnote omitted). For these very same reasons, the Commission should not adopt an interim band sharing plan in the United States for MSS operations.

B. The Establishment of Appropriate Out-of-Band Emission Limits for MSS Uplinks Would Eliminate Any Perceived Need for an Interim Plan

Even if the U.S. reversed its position and decided to use GLONASS for precision approaches in the United States, the establishment of appropriate out-of-band emission limits for MSS uplinks would eliminate the need for any interim or transition plan once GLONASS moves to Channels 0-12 by 1998.^{7/} Indeed, the Commission explicitly recognizes that the possible effect of MSS

^{6/} GLONASS can operate as a aeronautical radionavigation service ("ARNS") in the 1610-1616 MHz band pursuant to RR 732 of the international Radio Regulations.

^{7/} See Report & Order, at n.58.

systems operating in the United States on GLONASS operations, before it migrates to its final frequency configuration, is dependent upon "the extent to which out-of-band emission limitations may be needed for MSS transmissions."^{8/}

Motorola submits that the Commission should reconsider its decision to adopt an interim band plan to protect GLONASS operations, and instead to require all of its licensees to design their systems so as to avoid causing interference into GLONASS receivers once the U.S. certifies GLONASS is appropriate for use in U.S. airspace.^{9/} Such an alternative would be far superior to the loss of up to 2 MHz of precious MSS spectrum as envisioned for a time period to be determined by the Russian Federation under the interim band plan. The Commission notes that a Working Group (SC-159 WG6) of RTCA, Inc. ("RTCA") has been established to analyze interference from the many potential sources to GNSS and possible mitigation techniques, and that the FCC expects this Working Group's report to include an assessment of the out-of-band emission limits on MSS operations to protect GLONASS below

^{8/} Report & Order, at ¶ 51.

^{9/} In this regard, there does not appear to be any record support for the Commission's observation that a 4 MHz guardband would be needed in order to protect GLONASS receivers from MSS uplinks. See Report & Order, at ¶ 49 n.58. The tighter the out-of-band emissions mask, the smaller the guardband required to protect GLONASS receivers. In fact, Motorola submitted a proposed mask in its comments which, if implemented, would fully protect GLONASS operations at Channels 0-12 even for precision approaches and landings. See Motorola Comments, at App. 1; Motorola Reply Comments, at App. 1.

1610 MHz.^{10/} See Report & Order, at n.61 and ¶ 137. Once this group has completed its work of assessing all the potential interference sources to GNSS, the Commission should be able to determine the need for and level of out-of-band emission limits on MSS systems that will adequately protect GLONASS from interference after 1998 while avoiding any loss of MSS spectrum.^{11/}

C. An Interim Plan Is Not Necessary in Light of the Position of the United States to Coordinate only the Final Configuration of the GLONASS-M System

Another reason not to impose any interim band plan on U.S. MSS licensees is the recent coordination between the United States and the Russian Federation concerning the coordination of the GLONASS-M system. Motorola understands that the United States has agreed to complete ITU coordination only as to the "final carrier frequency configuration" of GLONASS-M, which encompasses Channels -7 to +6 with Channels 5 and 6 being used only as technical frequencies and only then when the satellites are within view of Russia. The parties further agreed that mutual interference between U.S. MSS systems and GLONASS-M could

^{10/} This Working Group is also expected to examine the probability of this type of interference occurring. The potential for an MSS terminal causing harmful interference to a satellite radionavigation receiver is determined by a significant number of coincidental probabilities, i.e., that the MSS terminal is transmitting on an interfering frequency at the edge of a runway while an aircraft is in an instrument approach. Such a probability density function must be associated with limitations on MSS terminals such as an out-of-band emission mask.

^{11/} It is also conceivable that the RTCA will only develop a GNSS standard for the use of GLONASS in its final configuration, in which case there would be no loss of MSS spectrum.

arise, but that both Administrations would take all practicable steps to reduce mutual interference to an acceptable level.

These agreements and understandings do not require, as Motorola understands them, that the United States limit MSS operations within the United States in order to protect GLONASS-M receivers operating at or near the 1610 MHz band edge. Rather, any steps implemented to avoid "mutual interference" must be "practicable" under the circumstances. Motorola submits that until the Russian Federation implements the final configuration of the GLONASS-M system, it would not be practicable for U.S. MSS systems to avoid causing potential interference to GLONASS-M receivers during aircraft approaches and landings, unless appropriate out-of-band emissions limits are placed on all MSS systems.^{12/} Otherwise, there simply will not be sufficient spectrum for U.S. MSS systems to operate in and still serve the needs of their customers.

D. The Commission's Interim Plan is Inequitable and Disproportionately Burdens the FDMA/TDMA Band Segment

Even if an interim band plan were otherwise deemed appropriate, the specific plan adopted by the Commission disproportionately burdens the lone system occupying the FDMA/TDMA band segment.^{13/} While Motorola agreed in the Joint

^{12/} As the Commission recognizes, it is unlikely that avionics manufacturers will design and manufacture GNSS equipment with the interim GLONASS frequency plan. See Report & Order at ¶ 51 n.62.

^{13/} As previously indicated, Motorola disputes the need for a 4 MHz guardband between GLONASS and CDMA MSS operations.

Proposal to share equitably the burden of any impaired spectrum resulting from a requirement to protect GLONASS, the four parties signing that agreement further agreed that any interim band plan would not take effect unless or until a second CDMA system became operational in the MSS band segment.^{14/} See Joint Proposal at 5. The Commission ignored this aspect of the Joint Proposal without any explanation. The importance of this provision is obvious. It is only when the second CDMA system becomes operational that any potential exists for there to be a constraint on the first CDMA operator's ability to provide service. Prior to that time, even the loss of a few megahertz of spectrum at the bottom of the CDMA band segment would not appreciably affect a CDMA operator's ability to serve its customers.

The inequities in the Commission's interim band plan are further evidenced by the fact that the IRIDIUM system would lose up to 24.3 percent of its available capacity if it were forced to operate in accordance with the interim band plan, whereas some of the other CDMA operators, such as TRW, would not lose any capacity by shifting their channelization plan. This disparate treatment is particularly troubling in light of the fact that the IRIDIUM system is not the cause of any interference to GLONASS operations below 1615 MHz and that the amount of impaired spectrum is directly attributable to the Commission's unsubstantiated belief that CDMA operators are unable to control

^{14/} Indeed, this aspect of the Joint Proposal was first reflected in the Motorola/LQP Joint Comments filed last year. See Joint Comments submitted by Motorola and LQP (Oct. 7, 1993).

their out-of-band emissions to an as yet unspecified level at the lower end of the band.

The Commission must also reconsider its interim band plan in light of the significant changes made by most of the CDMA applicants in the November 16, 1994 amendments to their applications. As the Commission states, its interim plan is based upon the system designs presented by each of the applicants in the Negotiated Rulemaking proceeding some 18 months ago. Rather than having four CDMA applicants proposing narrowband 1.25 MHz channels and one applicant proposing 5 MHz channels, the Commission is now faced with a much different set of circumstances (i.e., five different CDMA channelization plans ranging from 1.25 MHz, 1.39 MHz, 2.5 MHz, 2.56 MHz, and 3/7.5 MHz). Thus, the entire premise upon which the Commission based its decision has changed. Under these circumstances, the Commission's interim plan should be abandoned in favor of a condition placed on each MSS licensee subjecting it to any future out-of-band emission limits needed to protect GLONASS if the U.S. decides to implement GLONASS domestically. This approach would be consistent with the Memorandum of Understanding that was announced on November 18, 1994 between the Commission, FAA and NTIA, in which it was agreed that interference issues are to be resolved on a case-by-case basis until out-of-band emission limits are adopted. See FCC News Release, mimeo no. 50736 (Nov. 18, 1994).

**II. THE NECESSITY FOR AN OUT-OF-BAND EMISSIONS MASK
BETWEEN THE FDMA AND CDMA BAND SEGMENTS**

In its comments in this proceeding, Motorola pointed out the importance of establishing limits on out-of-band emissions that take into account the characteristics of these bands and the Commission's band sharing plan. See Comments of Motorola, at 50-53 (May 5, 1994); Reply Comments of Motorola, at 46 (June 6, 1994). As previously indicated, one of the reasons for adopting such limits is the possible need to protect GLONASS operations below the 1610 MHz band edge. Another important reason is the need for an appropriate mask between the CDMA and FDMA/TDMA band segments in order to avoid harmful interference into systems operating in each band segment. Indeed, four of the five Big LEO system applicants agreed that such a mask should be established in order to protect their systems from interference across the band segments. See Joint Proposal at 6-7. These same four applicants also agreed upon a statement of principles to guide them in developing this mask. Id.

The Commission, however, chose not to adopt either a specific emissions mask or the agreed-upon principles for developing such a mask. See Report & Order, at ¶¶ 62-63. Nor did the Commission address the limitations in the current emissions rule (Section 25.202(f)), which is bandwidth dependent and does not account for an intra-service sharing environment in which wideband CDMA systems will operate along side a narrowband FDMA/TDMA system. Motorola urges the Commission to reconsider these decisions and adopt the mask developed by Motorola to

protect other primary services in nearby bands as well as all MSS systems operating adjacent to one another.^{15/}

The Commission only briefly mentioned this important issue in its Report & Order. Rather than address it head on, the Commission chose to postpone its resolution until after the applicants filed their amended proposals and had an opportunity to negotiate a coordination agreement. Id. at ¶¶ 62-63. Now that the parties have filed their amendments, an emissions mask should be developed promptly which avoids any need for a guardband between band segments and adequately protects all other services.

III. THE COMMISSION SHOULD EXPLICITLY PROHIBIT U.S. MSS LICENSEES FROM SEEKING OR ENTERING INTO ARRANGEMENTS WHICH EXCLUDE OTHER U.S. MSS SYSTEMS FROM PROVIDING SERVICE IN ANY FOREIGN COUNTRY

In their Joint Proposal, four of the applicants agreed that the Commission should ban exclusive arrangements in foreign countries by U.S. licensees:

[N]o U.S. MSS permittee/licensee can seek or accept an exclusive assignment of the entire 1610-1626.5 MHz band segment or otherwise enter into any arrangement that would exclude other MSS systems from providing service in any foreign country.

Joint Proposal at 7-8. The Report and Order refrains from endorsing this pro-competitive ban. Yet such a prohibition on

^{15/} Motorola's proposed mask consists of fixed out-of-band power limits at fixed frequency offsets from the band edge. By keeping these limits fixed, the Commission would avoid impairing their effectiveness by the varying bandwidths that will be encountered in these bands. This mask is also consistent with CDMA terrestrial terminal designs. See Motorola Comments at Appendix 1.

exclusive arrangements is authorized by the Communications Act and is consistent with the Commission's policies relating to international licensees.

Title III of the Communications Act provides that, when granting a "license for a station intended or used for commercial communication between the United States . . . and any foreign country, [the Commission] may impose any terms, conditions, or restrictions authorized to be imposed with respect to submarine-cable licenses" by the submarine cable landing license act. 47 U.S.C. § 308(c) (1988). The submarine cable statute, in turn, authorizes the President to withhold or revoke a license when he shall be satisfied after due notice and hearing that such action

will assist in securing rights for the landing or operation of cables in foreign countries, or in maintaining the rights or interests of the United States or of its citizens in foreign countries, or . . . may grant such license upon such terms as shall be necessary to assure just and reasonable rates and service in the operation and use of cables so licensed.

47 U.S.C. § 35 (1988).

The Commission has used this authority to prohibit both Title III international satellite licensees and cable landing licensees from acquiring rights that are denied abroad to other U.S. entities. This prohibition is effected by incorporating it as a condition in the license. For example, in Orion Satellite Corp., 5 FCC Rcd. 4937, 4942 (1990), the Commission conditioned an international separate satellite system license as follows:

[N]either the Licensee, nor any persons or companies controlling or controlled by the

Licensee, shall acquire or enjoy any right, for the purpose of handling traffic to or from the United States . . . which is denied to any other United States company by reason of any concession, contract, understanding, or working arrangement to which the Licensee or any persons or companies controlling or controlled by the Licensee are parties.

5 FCC Rcd. at 4942. See also Optel Communications, Inc. 8 FCC Rcd. 2267, 2272 (1993); American Telephone and Telegraph Company, et al., 7 FCC Rcd. 130, 132-33 (1992); Transgulf Communications Ltd., Inc., 6 FCC Rcd. 2335, 2337 (1991).

A failure to prohibit MSS licensees from soliciting or entering into arrangements with foreign Administrations that would exclude other U.S. MSS licensees would depart from this precedent and from the exercise of the Commission's authority under Section 308(c) of the Act. This prohibition is even more compelling here in light of the global coverage requirement the Commission has imposed on all U.S. Big LEO licensees.

IV. THE COMMISSION SHOULD INTERPRET ITS SATELLITE SYSTEM REPLACEMENT RULES TO ALLOW FOR FLEXIBILITY IN BUILDING NEXT GENERATION SATELLITE SYSTEMS

One of the Commission's new rules for the Big LEO service is a prohibition against filing "system replacement applications" other than during a four-month filing window approximately seven years into the existing license term. See Report & Order, at ¶ 186. While the Report & Order goes on to refer to such applications as for "next generation" systems, id. at ¶ 187, the specific rule is entitled "Renewal of Licenses." Rule 25.120(e).

Motorola is concerned that this rule could be interpreted as preventing Big LEO licensees from applying for authorizations to construct, launch and operate "next generation" systems to take advantage of advances in satellite system designs and to include additional spectrum assignments to meet demand requirements. Such an interpretation would be inconsistent with the Commission's other rules concerning the replacement of individual satellites during the license term (see Rule 25.143(c)), and could inhibit continuity of service to the public. Instead, Motorola urges the Commission to clarify its rules to allow not only for the filing of modifications to individual satellites as part of a licensee's blanket license, but also the ability to file for "next generation" satellite systems at any time. Such flexibility is needed by system licensees in light of the amount of time required to obtain regulatory approvals and to build Big LEO systems.

V. THE COMMISSION SHOULD NOT ALLOW AMSC TO AMEND ITS APPLICATION TO GAIN ACCESS TO MORE SPECTRUM

A. Competitive Considerations Warrant the Dismissal of AMSC from this Proceeding

The Commission failed to address in its Report & Order several arguments made by Motorola and others in their comments in this proceeding concerning the need to encourage competition by eliminating AMSC as an applicant for spectrum in these frequency bands. See, e.g., Comments of Motorola, at 33-34 (May 5, 1994); Reply Comments of Motorola, at 6-9 (June 6, 1994). The

encouragement of fair competition is an important consideration that the Commission must take into account as part of its mandate to further the public interest. See FCC v. RCA Communications, Inc., 346 U.S. 86, 93 (1953); ITT World Communications, Inc. v. FCC, 725 F.2d 732, 747 n.33 (D.C. Cir. 1984) (although not an end in itself, fair competition is important as a means of furthering the public interest). The Commission has occasionally accepted the provision of certain services by only one or two entities. However, what the Commission has never accepted, and what the Commission may not accept under its public interest mandate, is the creation of an uneven playing field -- where one licensee is given a competitive advantage over other licensees providing the same services. The Report and Order leaves room for exactly such an unacceptably anti-competitive configuration of the MSS market and it must take measures to avert this possibility.

The Commission should not lose sight of the fact that the MSS market will comprise services provided through the 1610-1626.5 MHz/2483.5-2500 MHz bands as well as through other bands allocated to the service. In the 1544-1559 MHz/1645.5-1660.5 MHz bands (the upper L-band), the Commission has already exclusively licensed AMSC to provide MSS in the United States. Also, having received its license (and Section 319(d) construction waivers) many years prior to any of the Big LEO applicants, AMSC has a significant head start. As a result of this head start, AMSC will have a period of many years in which to create and cultivate an MSS customer base, before any of the Big LEO licensees can even begin to compete for market share.

In fulfilling its public interest obligations, the Commission must also look at the terms upon which each licensee obtains access to spectrum. Notably, in the rulemaking for licensing Personal Communications Services ("PCS"), the Commission considered it necessary to restrict the access of incumbent cellular licensees to the PCS spectrum. Cellular licensees are only eligible for one 10 MHz license out of 120 MHz available in any PCS area that significantly overlaps with the cellular system's existing coverage area. In the Matter of Amendment of the Commission's Rules to Establish New Personal Communications Services, Second Report and Order, 8 FCC Rcd. 7700, 7744-45 (1993). This restriction was meant to mitigate the competitive advantages already enjoyed by cellular licensees, to avoid the creation of an uneven field, and to address the Commission's concern "with the potential for unfair competition." Id. at 7744. These competitive considerations are equally applicable to the MSS industry, and the Commission simply may not disregard them in this proceeding. As Motorola has pointed out in its Comments and Reply Comments, competitive considerations compel disqualification of AMSC from the 1610-1626.5 MHz and the 2483.5-2500 MHz bands.

The Commission has ample authority to disqualify an applicant on competitive grounds. Indeed, the Commission has previously excluded an applicant in these same bands (Omninet) because it was merely an applicant, not even a licensee, for the provision of service in another band. See RDSS Order, 104 F.C.C. 2d 650, 658-61 ¶¶ 14-19 (1986). See also Establishment of